

IMPACT OF A STATE-WIDE PROFESSIONAL DEVELOPMENT MODEL FOR FORMATIVE ASSESSMENT

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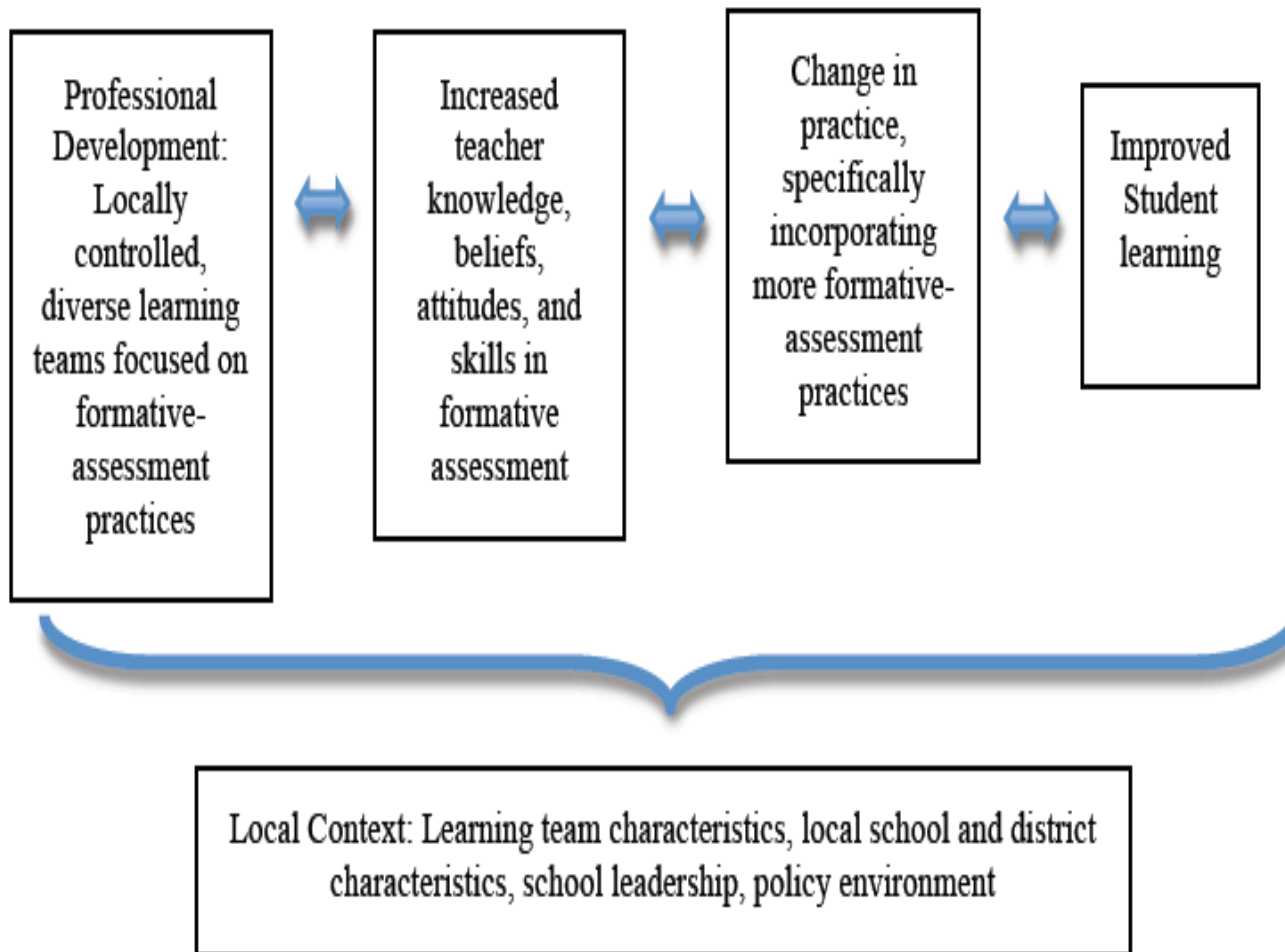
Presentation Overview

- Formative Assessment in Michigan (Vincent Dean, MDE)
- Overview of the FAME Research Agenda (Amelia Wenk Gotwals, MSU)
- The Influence of Shared Expertise on Learning Team Discussions (John Lane, MSU)
- Nature of the Activity: Enabling Factors for Formative Assessment Learning (Dante Cisterna, MSU)
- The Influence of Coaches on Learning Team Discussion (Tara Kintz, MSU)
- The Impact of FAME on Teachers' Formative Assessment Knowledge and Practices (Amelia Wenk Gotwals, MSU)
- FAME for the Future (Edward Roeber, MSU)



OVERVIEW OF THE FAME RESEARCH AGENDA

Model for Studying FAME PD



Why Formative Assessment?

- High leverage/core practice (Ball et al, 2009; Grossman, 2012)
- However, teachers struggle with:
 - ▣ The idea of “assessment” (e.g., Otero, 2006; Shepard, 2000; Webb & Jones, 2009)
 - ▣ Formulating “good” questions (e.g., Mergendoller, Marchman, Mitman & Packer, 1988)
 - ▣ “Noticing” the nuances of students’ ideas (e.g., van Es & Sherin, 2008)
 - ▣ Adjusting instruction based on students’ ideas (e.g., Feldman & Capobianco, 2008; Heritage, 2008; Ruiz-Primo & Furtak, 2007)
- PD has been shown to help teachers improve their formative-assessment practices (e.g., Popham, 2008; Schneider & Randel, 2009; Wylie, Lyon & Goe, 2009)



Professional Development

- Effective PD:
 - ▣ Focus on instruction and student outcomes (Newmann, King, & Youngs, 2004)
 - ▣ Sustained over a long period
 - ▣ Engage teachers in a community that supports learning and teaching (Darling-Hammond, 1997, Stoll, Bolam, McMahon, Wallace & Thomas, 2006; Wenger, 1998)
 - ▣ Engage teachers in authentic problems of practice (Lave & Wenger, 1991; Webster-Wright, 2009; Wilson & Berne, 1999)



PLCs

- ❑ Shared teaching and learning goals
- ❑ Shared responsibilities for work
- ❑ Collaborative development of PCK
- ❑ Shared content and location focus? (Lee & Williams, 2006; Slavit et al, 2009)
- ❑ Led by experts? (Stein et al, 1999)

Borko, 2004; Grossman et al., 2001; Lachance & Confrey, 2003; Little, 2002



Data Sources: Surveys (2010-11)

	Fall Survey	Winter Survey	Spring Survey
Purpose(s)	Diagnosis, setting baseline for pre-post analysis, guiding project design.	Evaluating process of implementation	Evaluation of the annual period and making suggestions for next year
Respondents	348 LTMs 68 coaches	150 LTMs 37 coaches	122 LTMs 34 coaches
Number of questions	13 (LTMs) 18 (Coaches)	18 (LTMs) 21 (Coaches)	23 (LTMs) 17 (Coaches)

Video Data: 6 Focal Learning Teams

Learning Team	Coach Role	LT Make Up	Video Data
B	Elementary principal	All ES teachers from same building	2 meetings (~1 hr each)
Fo	HS teacher & Curriculum Coordinator	HS cross-disciplinary	3 meetings (~1 hr each) **5 classroom teachers
Fr	HS teacher	Vertical team – upper ES, MS & HS	1 meeting (~1 hr)
G (3 teams)	Curriculum & instructional coaches	ES, MS & HS teams	2 meetings (1.5 hr whole group; ~30minutes ind)
M	HS teacher	HS cross-disciplinary	2 meetings (1.5 hr + ~4 hrs)
WW	MS principal	2 ES teachers, 4 MS teachers	4 meetings (~1 hr each)

Analysis Techniques: Learning Teams

- Survey Data (Descriptive statistics)
- Video Data → Recursive Coding
 - ▣ Type of activity (e.g., sharing a tool; analyzing student work)
 - ▣ Participants (coach, learning team members)
 - ▣ Questioning (gathering info, clarifying, probing, other)
 - ▣ Feedback (paraphrase, evaluative, move practice forward, redirect conversation)
 - ▣ Depth of Discussion (1-way sharing; parallel sharing; linking ideas/examples; examination of WHY)
- Cross-Case analysis (Yin, 2009)



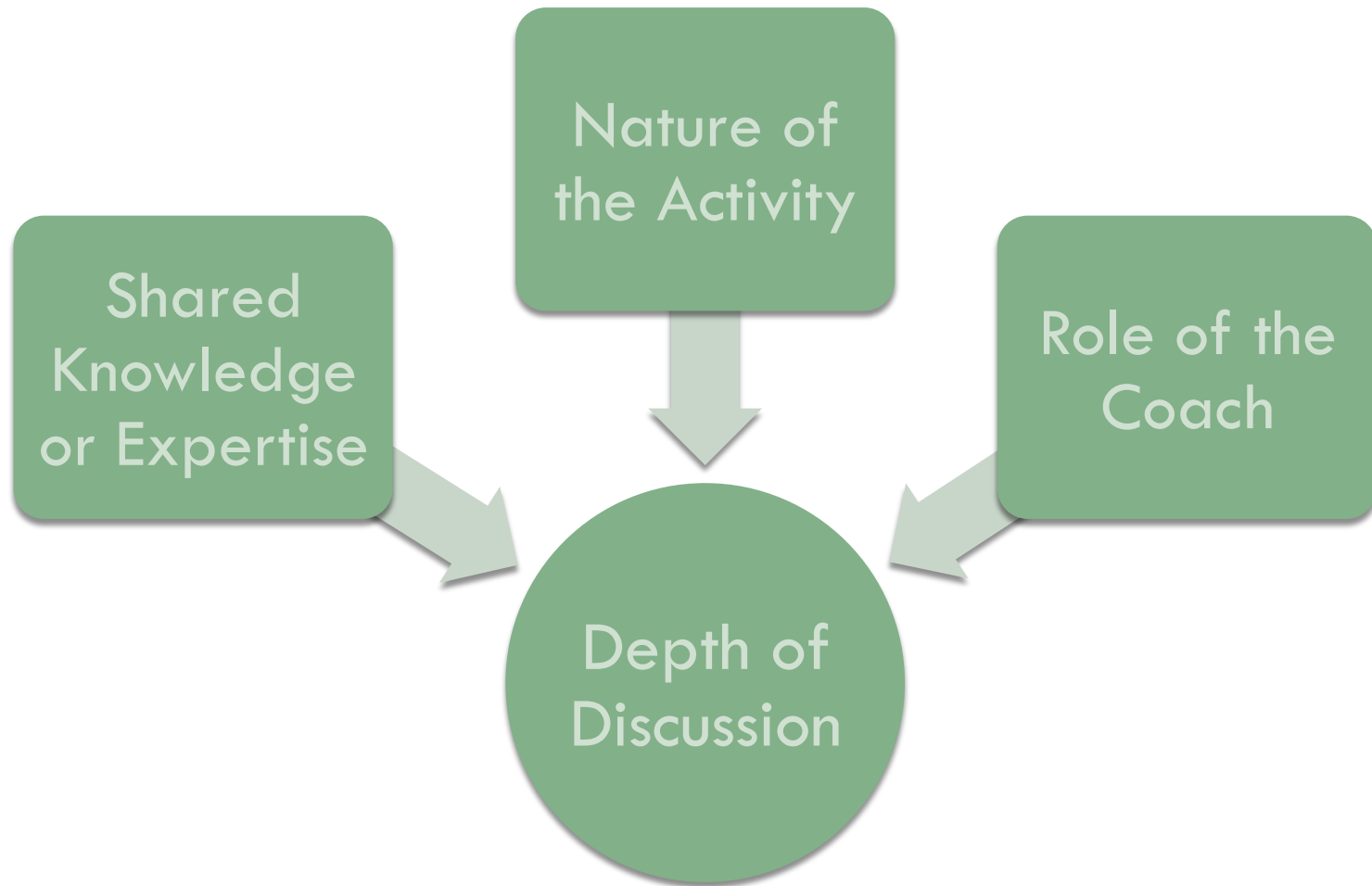
Classroom Video Coding

- Eliciting student evidence
- Use of learning targets
- Formative Strategies
 - Activating prior knowledge
 - Goal setting
 - Feedback use
 - Self assessment
 - Peer assessment
- Formative tools
- Link to learning team meetings



THE INFLUENCE OF SHARED EXPERTISE ON LEARNING TEAM DISCUSSIONS

Conceptual Framework



Necessary versus Sufficient (Ragin, 1999)

	Cause Absent	Cause Present
Outcome Present	1. Key cell for assessing necessity; cell should be empty (or relatively empty)	2. Cases in this cell establish the link between the cause and the outcome
Outcome Absent	3. Cell not directly relevant to the assessment of either necessity or sufficiency	4. Key cell for establishing sufficiency; cell should be empty (or relatively empty)



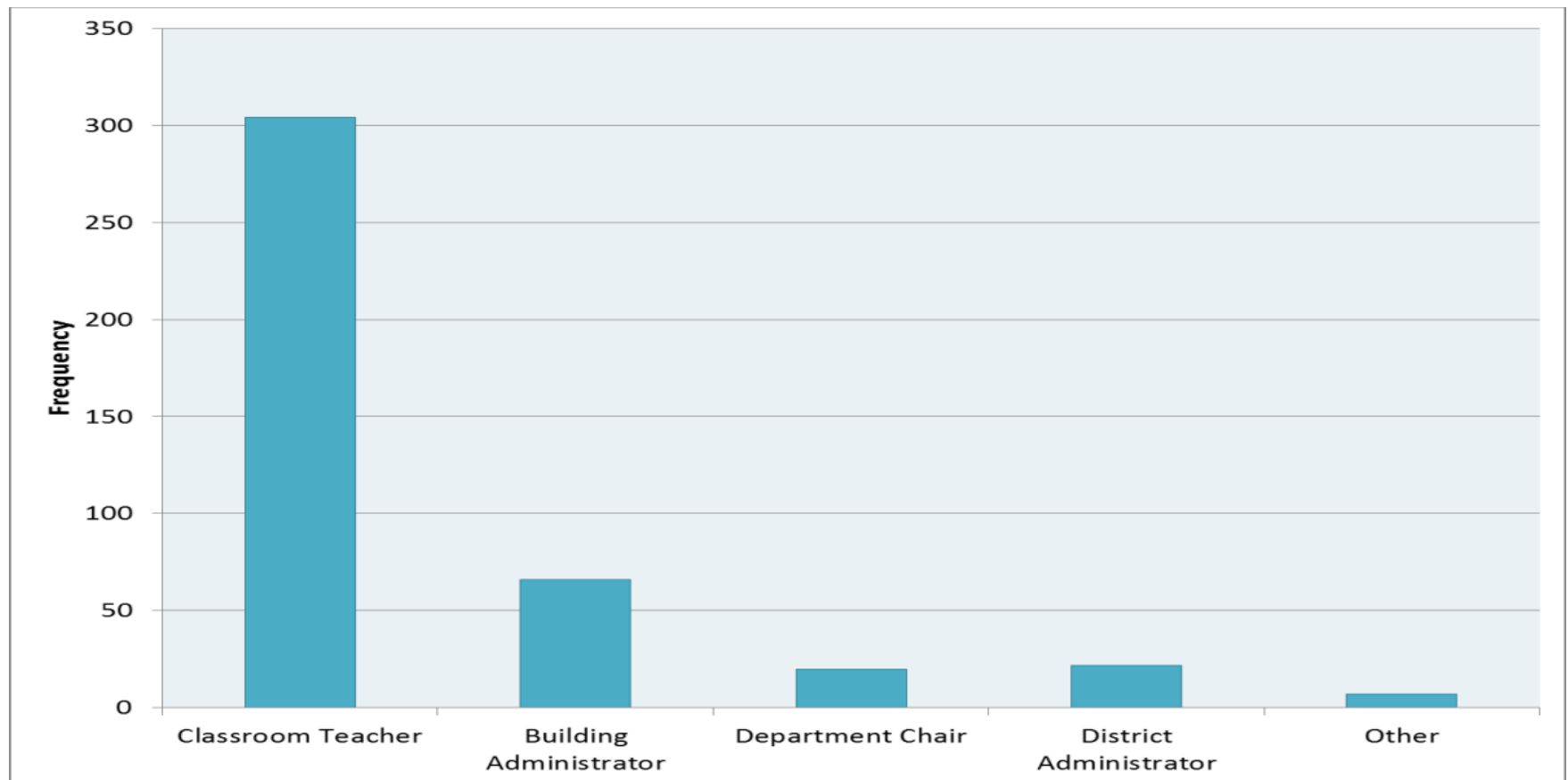
Significant Learning Team Characteristics

▣ Shared Expertise

- Shared knowledge of students
- Shared knowledge of content
- Shared knowledge of strategies



Learning Team Members



Who are our learning teams?

Team Composition	
All Elementary	21%
All Middle School	14%
All High School	16%
Multiple Levels	33%
Unknown	17%

Administrator Participating	
Yes	40%
No	40%
Unsure	20%

Single Content Focus	
Yes (LA, math, science, SS, art/music)	17%
No	83%

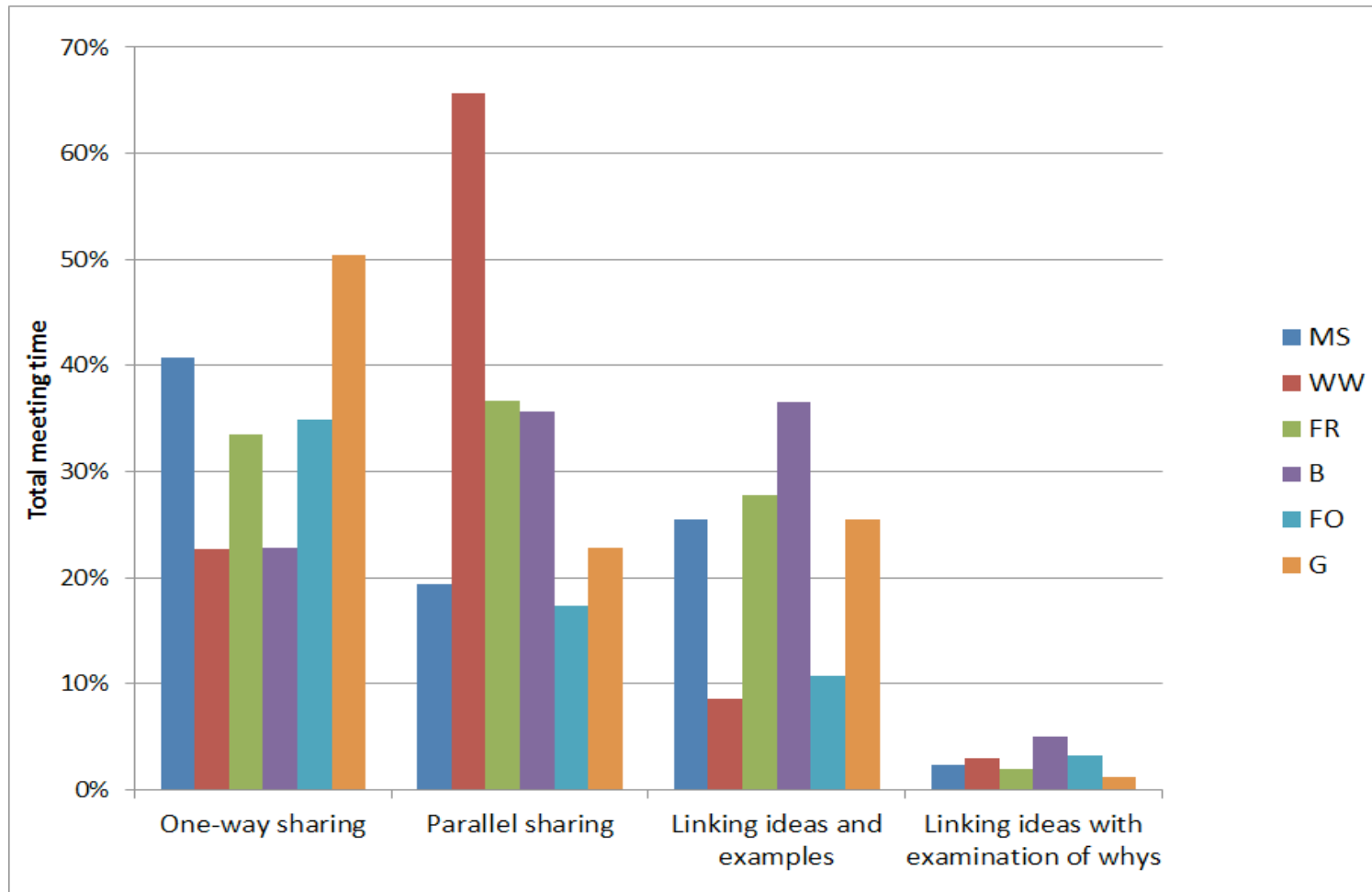
Fall & Winter Survey Results

Focal Learning Teams

<i>Learning Team B</i> Single Site Elementary Teacher Team Coach: Site Principal	<i>Learning Team FO</i> H.S. Multiple-Subject team Coach: Teacher and Coordinator	<i>Learning Team FR</i> Multi-grade, subject & level Coach: High School teacher
<i>Learning Team G</i> Three Teams: Elementary, M.S., and H.S. Coaches: Curriculum and Instruction Coaches	<i>Learning Team MS</i> H.S. Multiple-Subject team Coach: H.S. Teacher	<i>Learning Team WW</i> Elementary, M.S. Multi- Subject, Multi-Site Coach: M.S. principal



Depth of Discussion by Team



Importance of Content



Implications

- Shared content expertise influenced teacher interactions and allowed for deeper discussions.
- Shared experience with types of students allowed for connections among teachers about promoting student success.
- Multi-level, multiple-subject team structure encouraged parallel sharing about classroom experiences.



NATURE OF THE ACTIVITY: ENABLING FACTORS FOR FORMATIVE-ASSESSMENT LEARNING

Overview

- What did learning teams focus on overall?
- How were activities coded?
- What were our focal learning teams emphases?
- Examples of activities
- Implications for professional development



Overall Learning Team Meetings

	Focus areas	Areas perceived as beneficial
Planning	57%	36%
Reflecting	67%	63%
Problem Solving	28%	32%
Sharing	79%	79%
Formative Assessment Tools and Strategies	87%	60%
Resources	45%	35%
Other	5%	12%

Focus areas for learning team meetings and perception of benefits for these areas
(Data based on LTMs' Winter and Spring Surveys)

□ Meetings

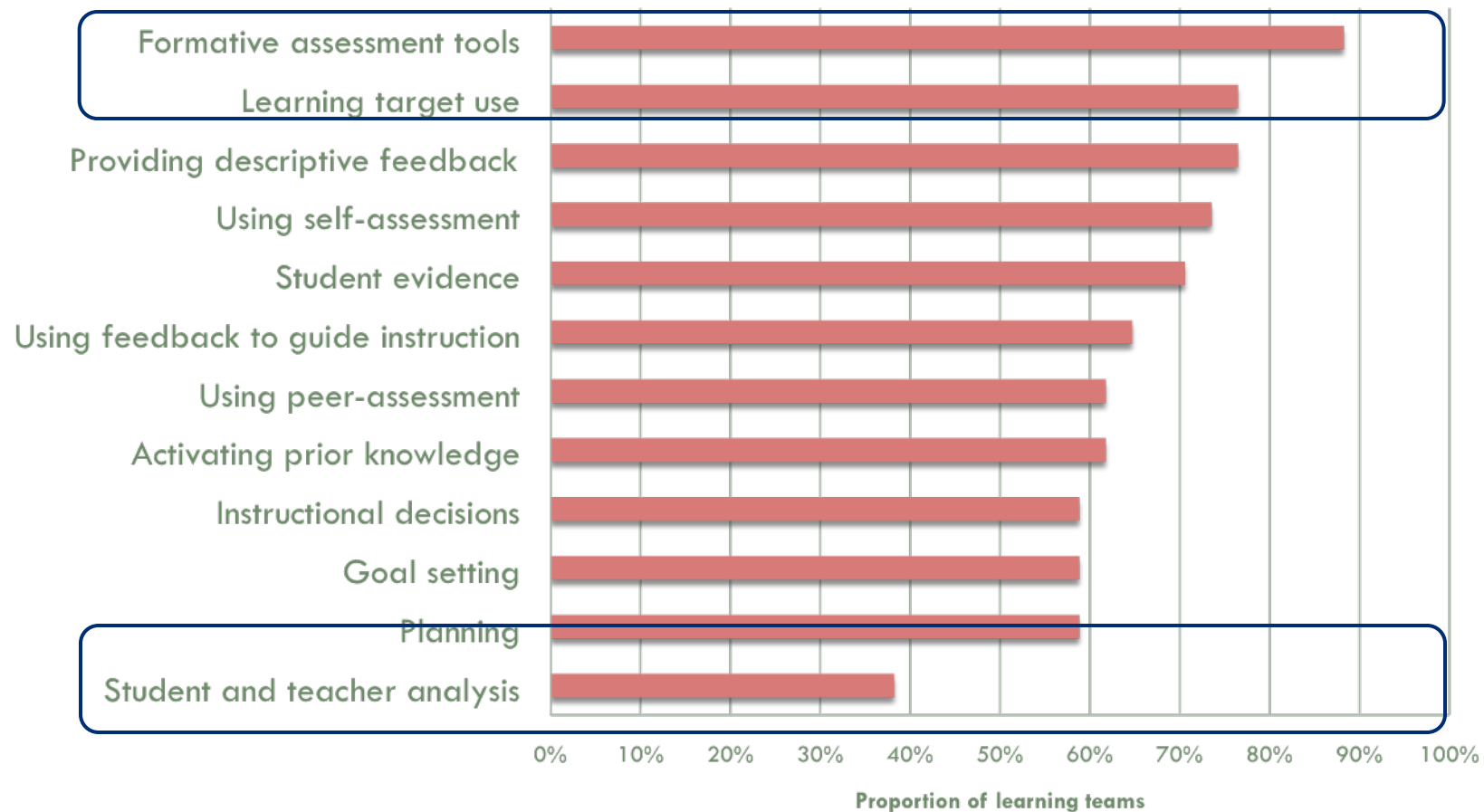
- ▣ 78% of LTMs reported meeting at least 5 times over the year and 43% of meetings took between 2-3 hours



Overall Learning Team Meetings

Types of Formative-Assessment Activities in LT meetings

(Source: Coach Spring survey; respondents could check more than one option)

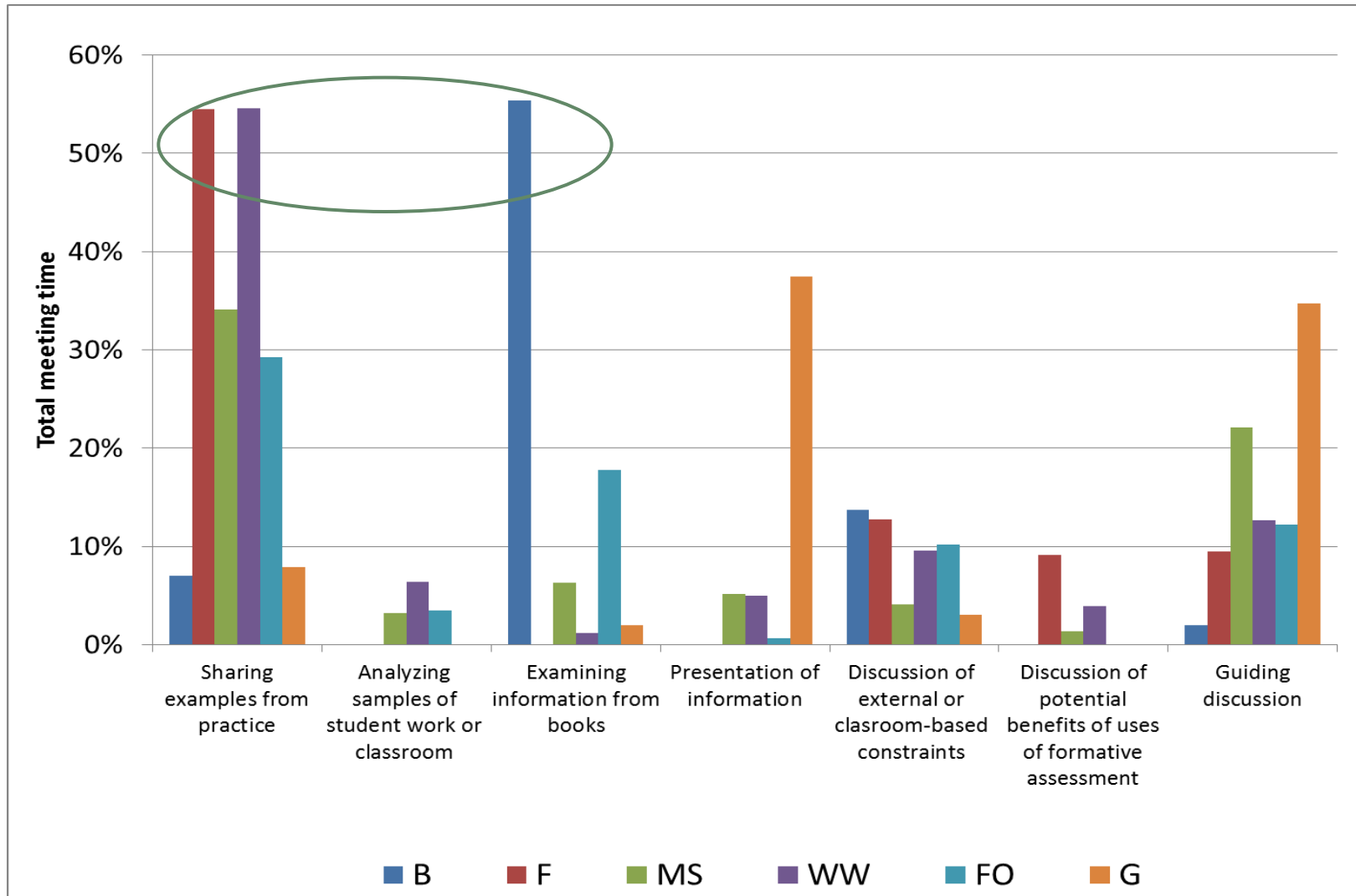


Activity Codes for Team Meetings

1	Sharing an example or tool from practice (stories of personal experiences, observations, or student work).
2	Analyzing & discussing examples of samples of student work or videos of classroom teaching.
3	Reading, examining, discussing information from a book or other source (e.g., video, website).
4	Presentation of information.
5	Discussion of external constraints or classroom-based obstacles.
6	Discussion of potential benefits of uses of Formative Assessment for student learning, teacher collaboration, school-wide reform.
7	Discussion of unrelated topics.
8	Guiding Discussion (e.g., setting the stage, giving directions, reviewing agenda, asking guiding questions, facilitating transitions).
9	Other



Focal learning teams activities



Activity Codes for Team Meetings

- General trends

- *Sharing examples or tools from practice* was the most frequent activity in four LTs.
- One LTs prioritized *examining information from a resource* (55% of the time).
- One LTs prioritized *presentation of information* (35% of meeting time).
- Two LTs spent more than 20% of the meeting time in activities for guiding discussions.



Example: Sharing Practices

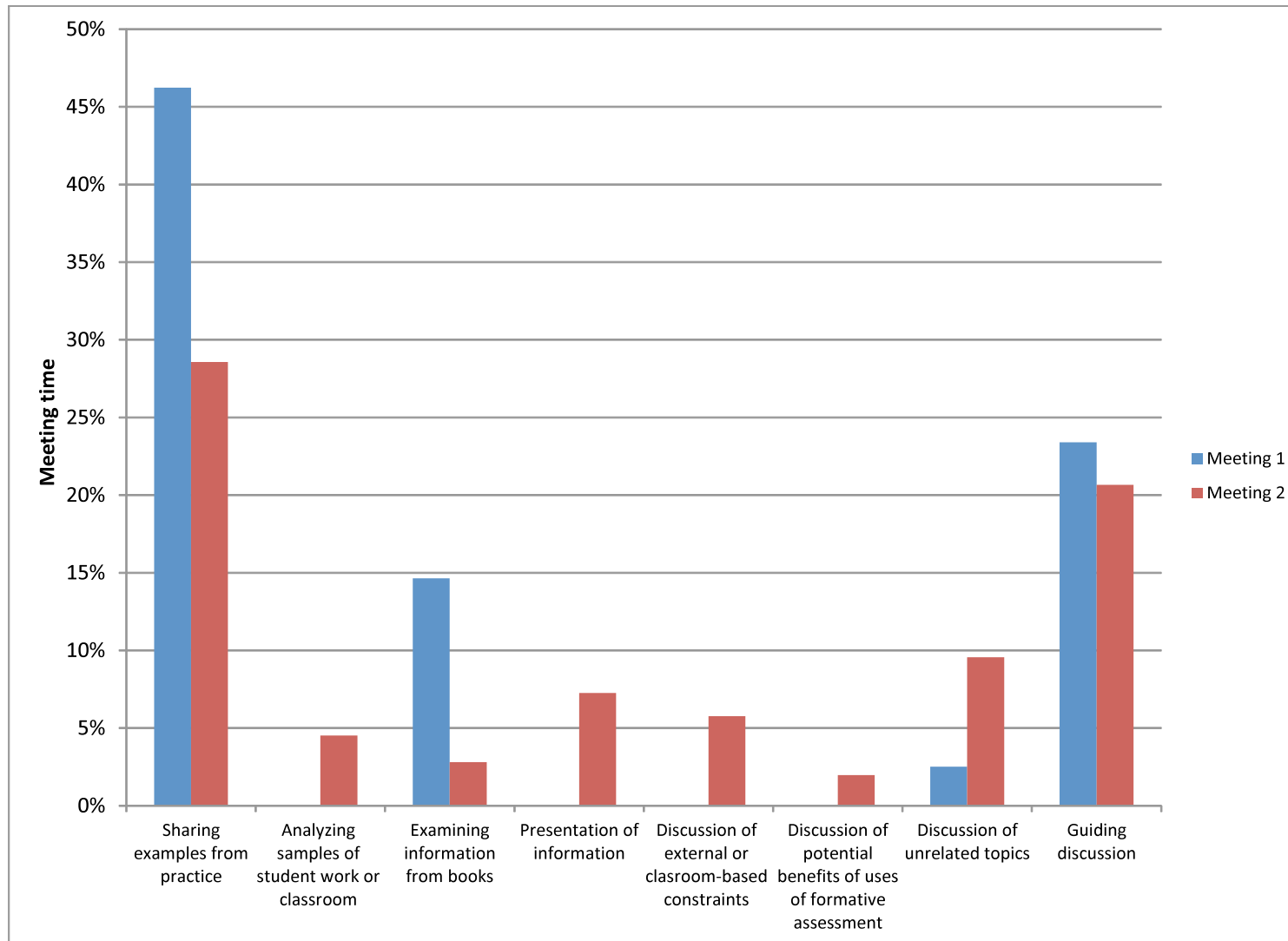


Example: Discussion of Questioning



Change in activities

Example: Team M



Implications for professional development

- Diversity of activities: according to each team's needs and characteristics.
- Challenge for LTs: moving from activities mainly based on sharing practices or learning about formative assessment knowledge to activities that engage teachers in authentic problems of professional practice (Lave & Wenger, 1991; Webster-Wright, 2009; Wilson & Berne, 1999).
- Nature of activities is a necessary factor for enabling quality discussions (not the only one).
- Increased support to guide LTs to a culture of learning (Sadler, 1989, Black & Wiliam, 1998, Shepard, 2000).



THE INFLUENCE OF COACHES ON LEARNING TEAM DISCUSSION

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Tara Kintz

With Appreciation to the MSU Educational Policy Center

Overview

- How does the role of the coach effect professional learning teams?
- Who are our coaches?
- Who are the coaches of the focal learning teams?
- How does the role of the coach influence:
 - ▣ Depth of Discussion
 - ▣ Questions
 - ▣ Feedback
- Coaching Examples
- Implications regarding the nature of shared knowledge



Theoretical Framework

- There is disagreement about the role of a coach and what constitutes a teacher learning community (Grossman, Wineburg, & Woolworth, 2001; Stein et al, 1999; Richmond & Manokore, 2011).
 - Expert vs. peer
 - Presenter vs. facilitator
- The model for FAME draws on the Cognitive Coaching™ model to train coaches to facilitate the work of learning teams.
 - Questioning and feedback



Coach Information

Position	% (Fall Survey; N=66)
Classroom Teacher	29%
Principal/Assistant Principal	21%
District Leader	28%
ISD Leader	20%
Retiree	2%

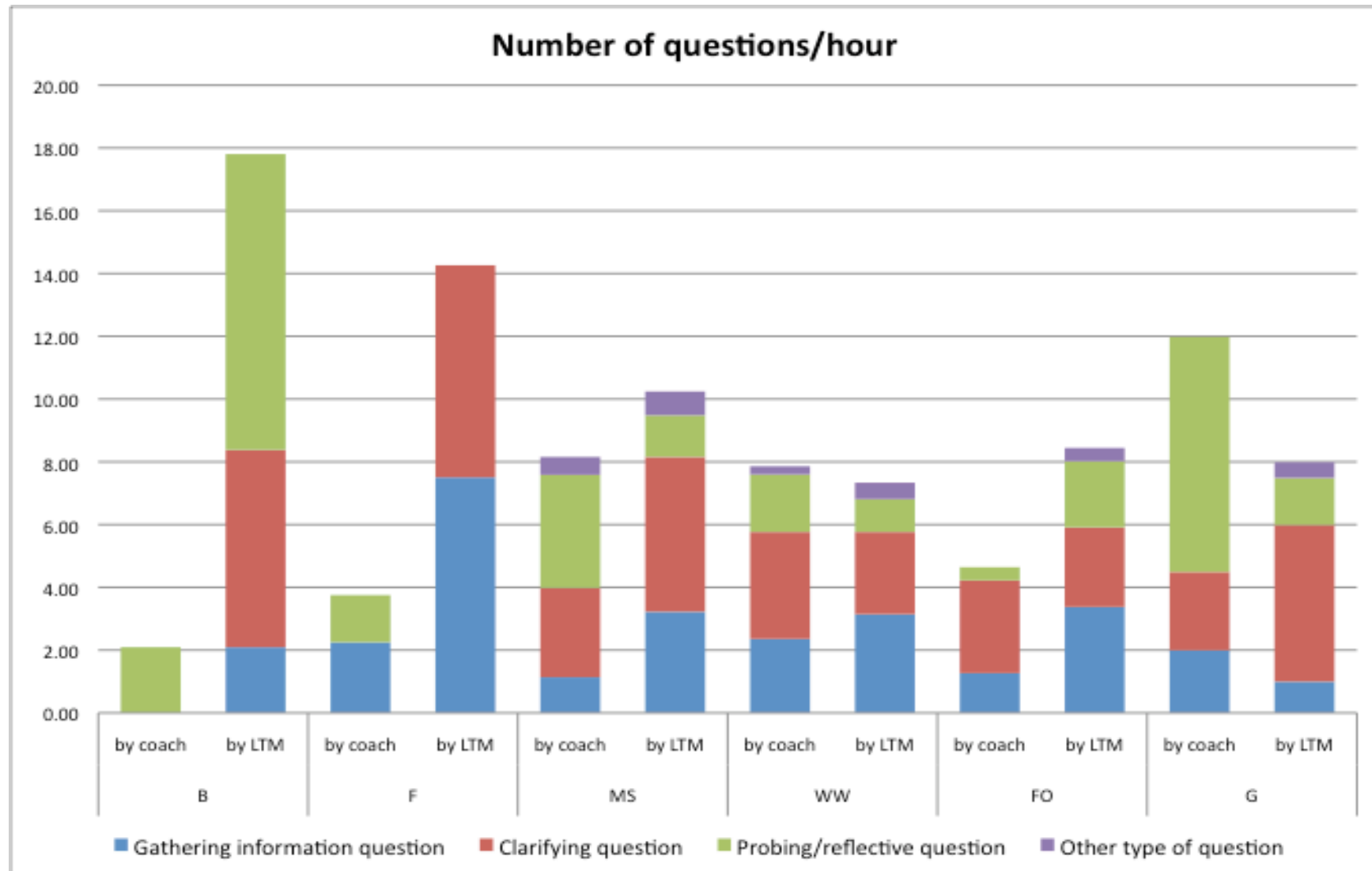


Focal Learning Team Coaches

Learning Team	Coach Role	LT Make-up
B	Elementary principal	All elementary teachers from the same building
FO	HS teacher and curriculum coordinator	High school cross-disciplines
FR	High School teacher	Vertical team: Upper elementary, middle school and high school
G (3 teams)	Curriculum and instruction coaches	1 elementary team, 1 middle school team, 1 high school team
M	High School Teach	High school cross-disciplines
WW	Middle school principal	2 Elementary and 4 Middle school teachers (same district)

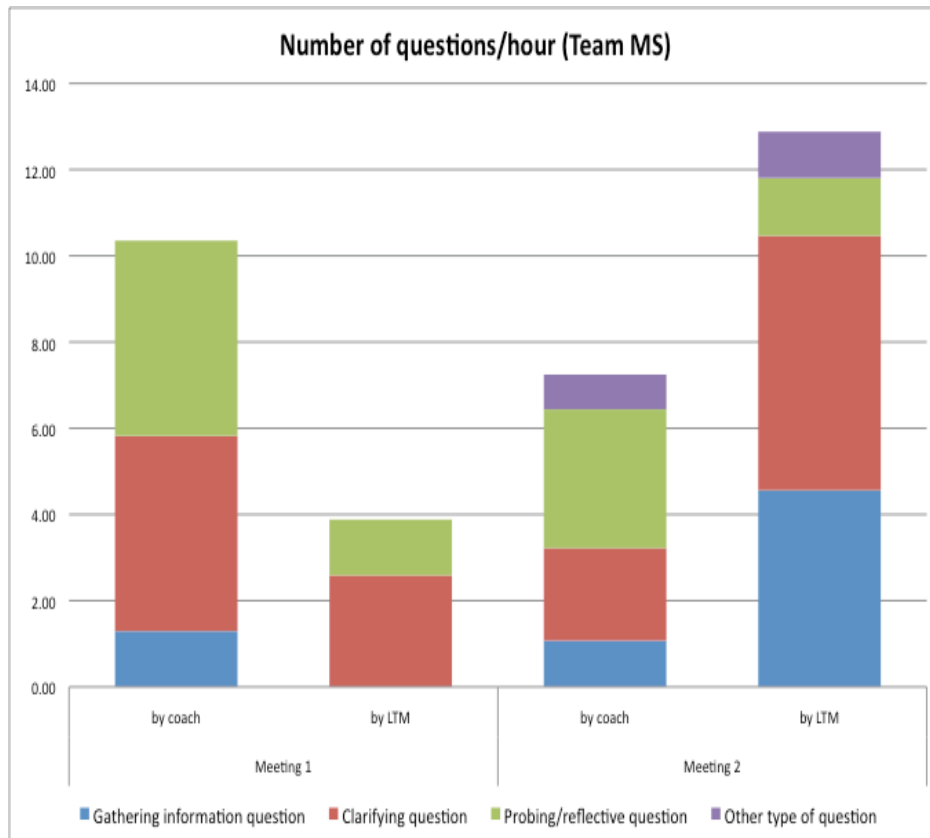


Overall Questions for Teams

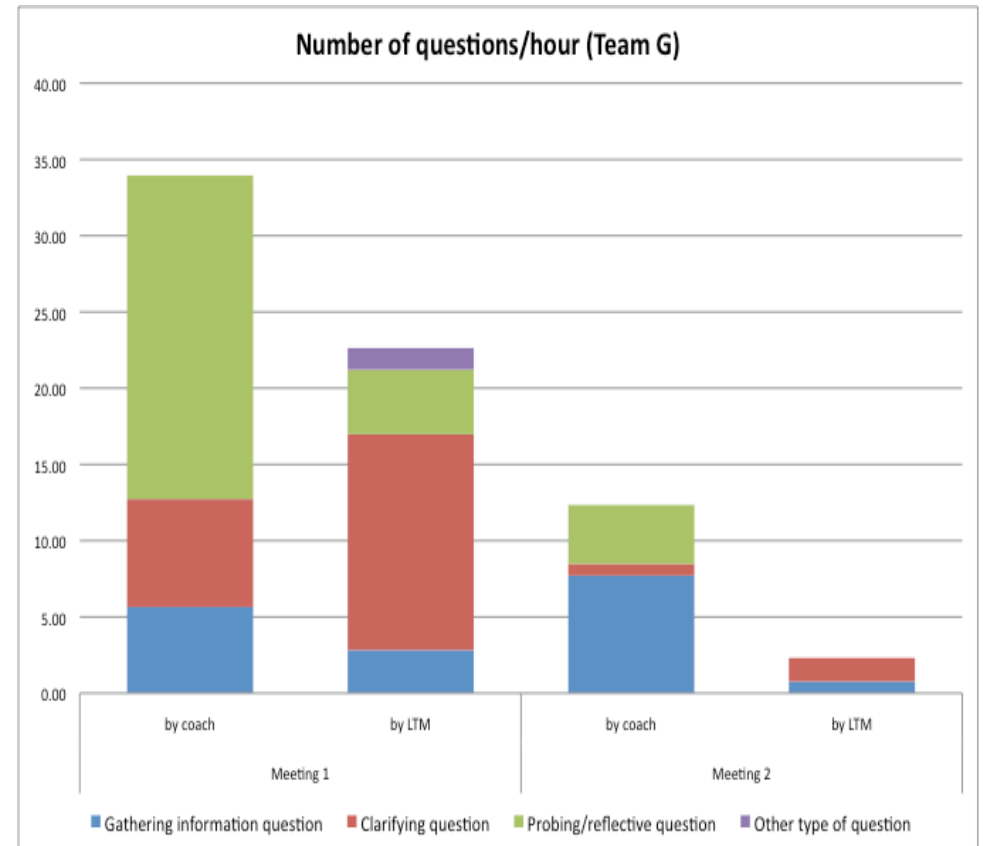


Comparison of Questions

Team M Increase in Questions



Team G Decrease in Questions



Learning Team M Example

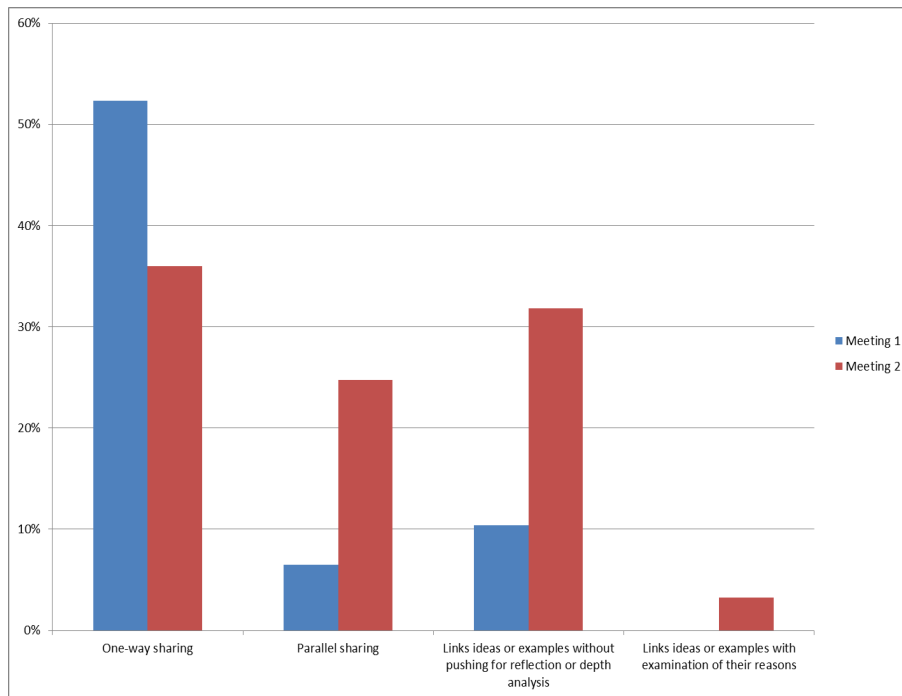


Learning Team G Example

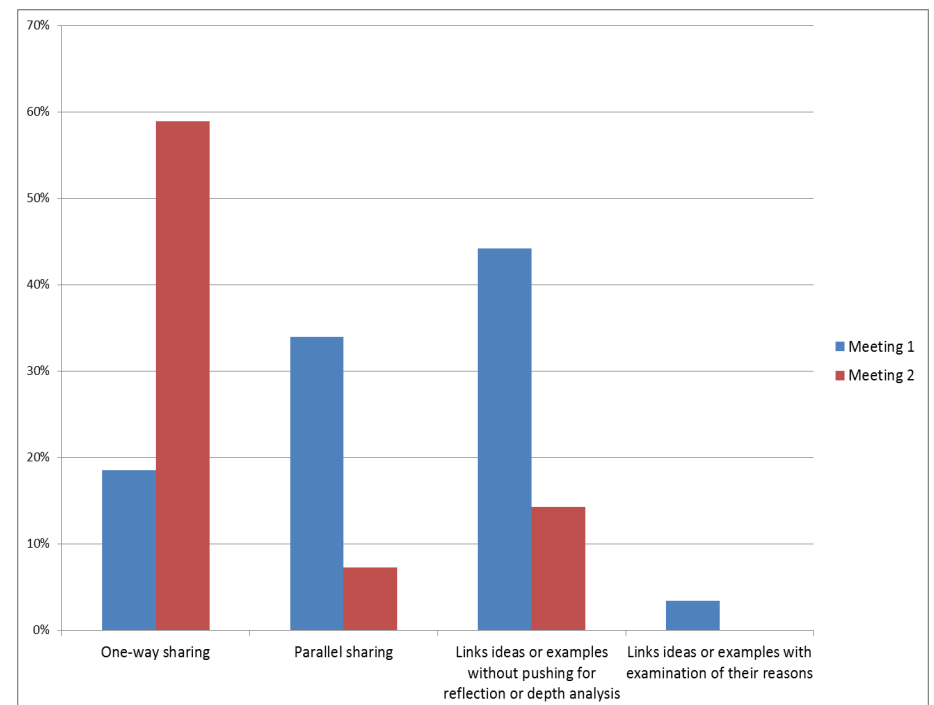


Depth of Discussion Comparison

Team M Increase in Depth of Discussion

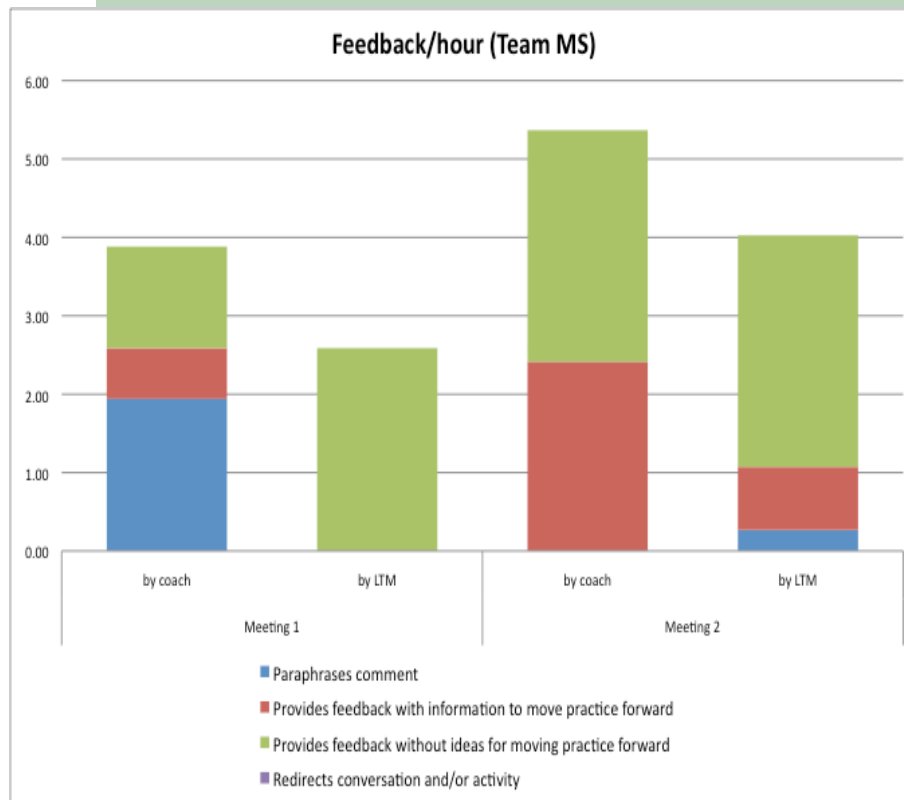


Team G Decrease in Depth of Discussion

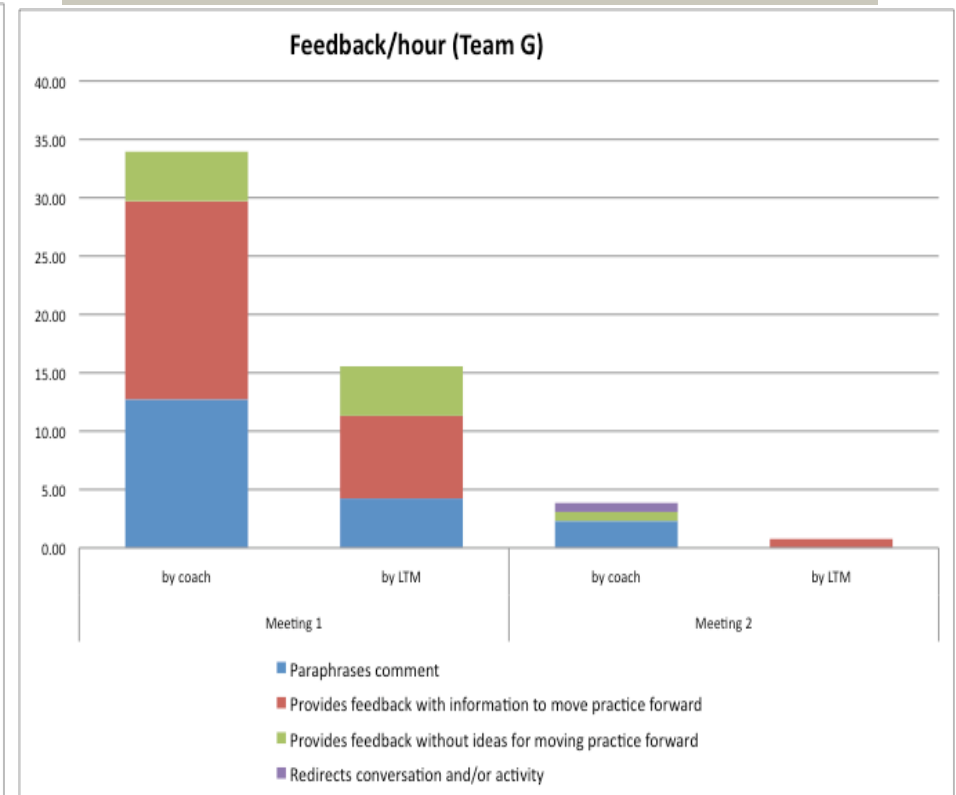


Comparison of Feedback

Team M Increase in Feedback



Team G Decrease in Feedback



Implications

- The stance of the coach as a facilitator, as represented in Team M, was associated with:
 - ▣ Increased depth of discussion, increased questions, and increased feedback over the course of the meetings.

- The stance of the coach as an expert role, as represented in Team G, was associated with:
 - ▣ less depth of discussion and decreased feedback over the course of meetings



FAME TEACHERS' FORMATIVE ASSESSMENT PRACTICES

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Amelia Wenk Gotwals

Overview

- Impact of FAME on teachers' perception of implementation
- Classroom enactment of formative-assessment practices



Teacher Practice

	Fall survey (n=314)	Spring survey (n=103)
Summative assessment only	43%	11%
Formative assessment only	20%	25%
Summative and formative assessment	7%	61%
Others (e.g. generic assessments)	31%	3%



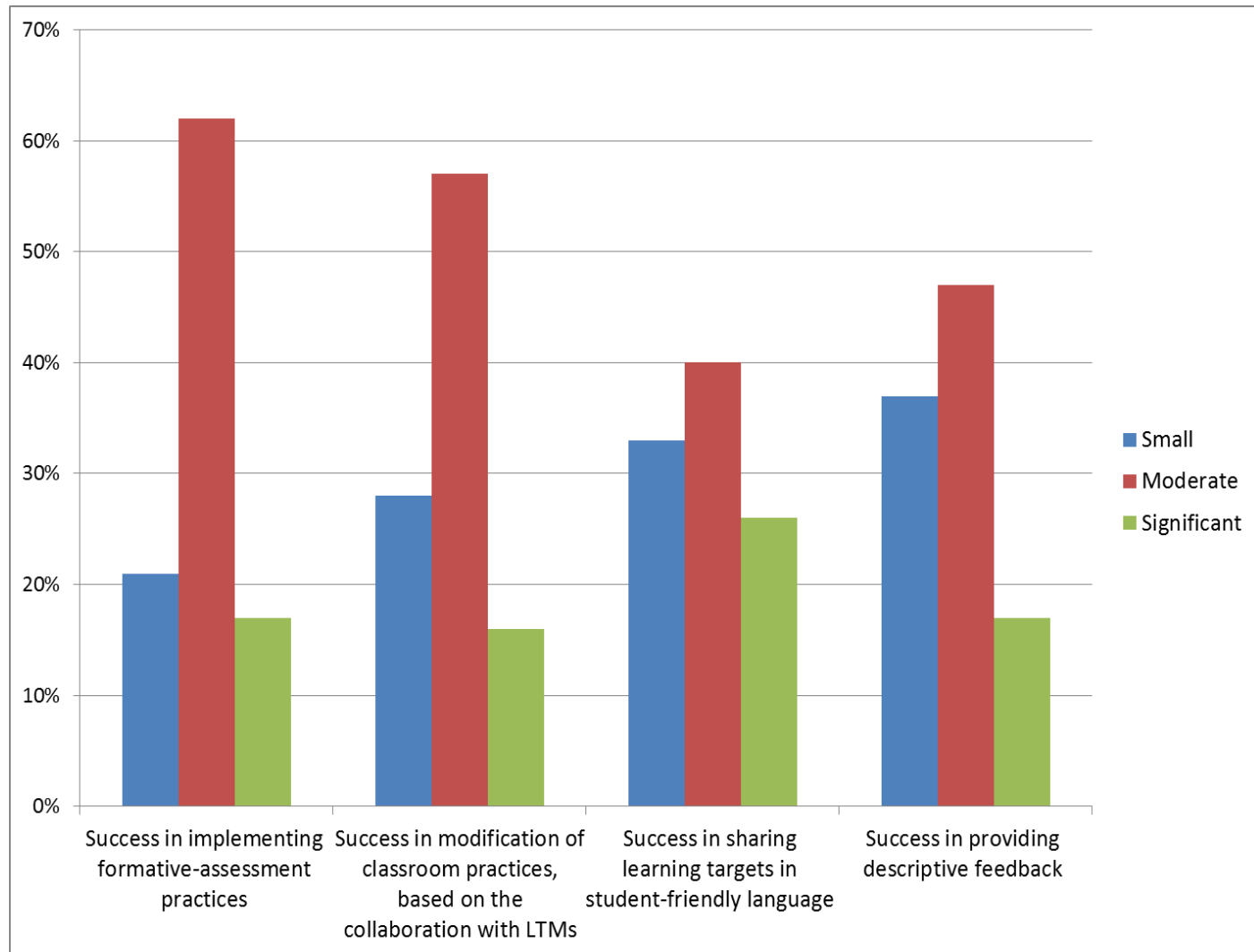
Perceptions of FAME model

- 79% LTMs reported that the FAME model was “effective” or “very effective”
- 85% LTMs reported the meetings impacted their use of formative-assessment practices
- 82% LTMs reported using new strategies or tools with their students (esp. learning targets, assessing prior knowledge, descriptive feedback, exit slips, learning logs)

□ Winter Survey, N=150



Degree of Success in Enacting FA



Teachers in Fo Learning Team

- HS cross-disciplinary team with 2 coaches (teacher and curriculum coordinator)
- Video from 5 classroom teachers



Classroom Enactment: Learning Targets

- Sharing learning targets in “student friendly” language
 - ▣ Teacher planning
 - ▣ Student learning
- Focus of Fo learning team



Algebra 1 Class: Learning Targets



Spanish 1: Learning Targets



Learning Targets

- Both in student friendly language
- Spanish teacher explicitly linked the activities of the class to the targets and linked back to the targets throughout the class



Classroom Enactment: Student Evidence

- Student Evidence: “Develop and implement products, observations, and conferences as types of assessments that gather student evidence”
- 1:1 Student conferences



Algebra 1: Conferences



Senior English: Conferences



Implications

- Learning a new practice and then becoming effective in this practice takes time
- Need for models of what these practices look like
 - ▣ Practices intertwined with the content
- Future work on video of teachers' classrooms



FAME FOR THE FUTURE

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Edward Roeber

Overview

- Plans for 2012-13
- Review of the FAME Program – 2007-2012
- FAME Beyond 2013



Plans for 2012-13

- The MSU Research Team will continue to:
 - ▣ Record a small number of learning team meetings, to gauge changes in the nature of discussions (Yr 1, 2 & 3)
 - ▣ Record a small number of teachers using formative-assessment strategies in their classrooms, looking for changes in teaching practices
 - ▣ Survey and interview students
 - ▣ Survey all participants in the fall and spring
- Student achievement will be an even greater focus, as will be changes in teaching practices



Plans for 2012-13

- The MSU Research Team will also focus on:
 - ▣ The preparation of Year 1 Regional Leads
 - ▣ The work of Year 2 Regional Leads in rolling out FAME launches to Year 1 coaches and learning teams
 - ▣ The on-going support provided by the Regional Leads to coaches and learning teams in their region
 - ▣ The nature and types of support provided to year 2 and 3 teams continuing with the FAME program



Review of the FAME Program

- Because the FAME program is entering its 6th year, it is time to review it in order to enhance the program going forward
- The Michigan Assessment Consortium may lead this effort for MDE
- A small advisory committee, comprised of MDE staff, MSU researchers, and a subset of regional leads, coaches and learning teams members (and perhaps a student or two) will meet to review the FAME program



Review of the FAME Program

- The review will examine the following:
 - ▣ The recruitment of Regional Leads, coaches and learning teams
 - ▣ The pre-launch activities
 - ▣ The Launch for year 1 teams
 - ▣ How structured the three-year FAME program should be
 - Materials provided to year 1 teams
 - Activities and support provided to year 2 & 3 teams
 - ▣ How training and materials could be enhanced



Review of the FAME Program

- How FAME could be spread to more regions of the state and to more districts and schools
- Plan for the receipt and use of the formative-assessment “tools” from the SMARTER Balanced Assessment Consortium by determining
 - ▣ Which resources to make available
 - ▣ How to make them available
 - ▣ How to prepare recipients in the use of the resources



Review of the FAME Program

- How to bring formative-assessment preparation to pre-service institutions:
 - ▣ University-based instruction on formative-assessment strategies and practices
 - ▣ Whether FAME learning teams could include other sorts of educator groups – e.g., interns (student teachers), their MSU field supervisors and mentor teachers
- How to obtain the policy and financial support to ensure a future for FAME and the work on improving educators' assessment practices



FAME – Beyond 2013

- FAME comes home to Michigan
- Substantially increase participation in FAME
 - ▣ More Regional Leads
 - ▣ More teams
 - ▣ Broader state coverage
- Enhance the three-year program for coaches and learning teams
- Keep teams in the program for all three years
- Prepare for use of SBAC resources



FAME – Beyond 2013

- Work to incorporate pre-service formative-assessment work for future educators
- Obtain policy maker support for continued work on formative-assessment – in-service and pre-service
- Continue to conduct research on learning about formative-assessment practices, especially focused on impacts on teachers' practices and students' achievement

